

Appln. No. 10/708,558
Docket No. 144441/GEM-0101

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REMARKS / ARGUMENTS

Status of Claims

Claims 1-25 are pending in the application. Claims 1-15 and 25 stand rejected. Claims 16-24 are allowed. Applicant appreciates the Examiner's indication of the allowability of the noted claims. Applicant has amended Claim 25, leaving Claims 1-25 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §103(a) have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Rejections Under 35 U.S.C. §103(a)

Claims 1-15 and 25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Turner (U.S. Patent No. 6,591,854, hereinafter Turner) in view of Paul (U.S. Patent No. 4,372,334 hereinafter Paul).

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention in such a manner as to perform as the claimed invention performs. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

Additionally, Applicant respectfully submits that a prima facie case of obviousness cannot be supported by a proposed modification to a reference that, in the modified state, would still not perform as the claimed invention performs.

Regarding Claim 1

Claim 1 recites, inter alia;

“...a first burst disc, the first burst disc comprising *a first inlet and a first outlet*;

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a second burst disc, the second burst disc comprising *a second inlet coupled to the first inlet and a second outlet coupled to the first outlet...*

Dependent claims inherit all of the limitations of the respective parent claim.

The Examiner acknowledges that Turner does not disclose each and every element of the claimed invention, and looks to Paul to cure the deficiencies of Turner.

In looking to Paul, the Examiner makes a broad sweeping statement that "Paul shows this feature [using parallel passages with burst discs] to be old in the overpressure safety art." Paper 20060427, page 2.

In comparing Paul with the claimed invention, Applicant finds Paul to teach "...providing communication between a pressure vessel 3 and *a pair of relief vents 4 and 5...*" [Column 3, lines 24-25, and Figure 2], but to be absent the claimed "...a first burst disc, the first burst disc comprising *a first inlet and a first outlet*; a second burst disc, the second burst disc comprising *a second inlet coupled to the first inlet and a second outlet coupled to the first outlet*".

Contrary to the Examiner's allegation, Applicant finds Paul to teach first and second burst discs 8 and 9 having inlets that are coupled via flow directing member 11, but to have outlets that are specifically not coupled, each having its own, and distinctly different, relief vent 4 and 5, respectively.

As such, Applicant respectfully disagrees with the Examiner that Paul shows the deficiencies of Turner [parallel passages with burst discs where the inlets are coupled *and the outlets are coupled*] to be old in the overpressure safety art.

Accordingly, Applicant respectfully submits that the combination of Turner and Paul is absent any teaching, suggestion or motivation of each and every element of the claimed invention arranged so as to perform as the claimed invention performs. As such, Applicant submits that the combination of Turner and Paul cannot be used to establish a prima facie case of obviousness.

Furthermore, Applicant finds Paul to teach "...a multiple relief device system with an automated control system which is responsive to the rupture of a first disc to automatically actuate the valve to communicate the process with an unruptured relief

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device. The control mechanism can be manually overridden or may operate to partially swing the valve to the unruptured relief device so as to continue to vent some of the material..." (Col. 1, line 65 – col. 2, line 5).

Applicant respectfully submits that modification of Turner to incorporate two burst discs (items 8 and 9 of Paul) and two distinctly separate relief vents (items 4 and 5 of Paul) as suggested by Paul, so as to continue to vent some of the material, would still not result in the claimed elements of the instant invention arranged so as to perform as the claimed invention performs, since some material would continue to vent through the unruptured relief valve, thereby negating the possibility of isolating one burst disc from another, *and the first and second outlets would still not be coupled*, which is specifically claimed for in the instant invention.

As disclosed in the application as originally filed at Paragraphs [0019-0020], Applicant claims a magnet vent assembly that can accommodate ease of servicing of parallel arranged burst discs. Nowhere in the references does Applicant find ease of servicing to be a motivating factor to combine the References to arrive at the claimed invention.

Accordingly, Applicant submits that the References are absent any teaching, suggestion, or motivation to combine the References to arrive at the claimed invention, and to have the resulting combination perform as the claimed invention performs.

Regarding Claim 2 More Specifically

The Examiner broadly alleges obviousness of Claim 2 (Paper No. 20060427, page 2), by stating that "Paul shows this feature [using parallel passages with burst discs] to be old in the overpressure safety art. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention from the teaching of Paul to modify the cryostat with burst disk overpressurization control by adding a second passage with a burst disk to enable the switching of passages to improve the safety of the device and to enable one disk to be accessed while the other provides protection."

From the foregoing, it appears that the Examiner, without documentary evidence to support such a conclusion, is attempting to take official notice to support the

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conclusion.

Applicant respectfully disagrees that the claimed invention is common knowledge in the art such that it is capable of instant and unquestionable demonstration as being well-known, and therefore respectfully requests the Examiner to cite a reference in support of this assertion where an Official Notice is asserted and traversed. MPEP §2144.03.

For example, Claim 2 recites, inter alia:

“...a first valve in operable communication with the magnet exhaust, the first burst disc, and the second burst disc;

a second valve in operable communication with the exhaust vent, the first burst disc, and the second burst disc; and

wherein the first valve is configured to switchably direct a flow path of cryogenic gas from the magnet exhaust through either of the following: the first burst disc and the second burst disc; and *wherein the second valve is configured to switchably direct a flow path of cryogenic gas to the exhaust vent from either of the following: the first burst disc and the second burst disc.*”

In alleging obviousness of Claim 2, the Examiner acknowledges that Turner is deficient in teaching the use of *parallel passages with burst disks*, and looks to Paul to cure this deficiency. However, in relying upon Paul, the Examiner merely shows that two burst disks may be used with a common flow directing member 11. The Examiner does not appear to rely on Paul for teaching that “*the second valve is configured to switchably direct a flow path of cryogenic gas to the exhaust vent from either of the following: the first burst disc and the second burst disc*”, as such a teaching does not appear in Paul (at Fig. 2 and the accompanying text at column 3, lines 21-41, Applicant finds Paul to teach two distinctly separate relief vents 4 and 5, *that do not necessarily communicate with each other*). In Claim 2, the switching of the second valve occurs downstream of the burst discs, as evidenced by the word “from”. In Paul, Applicant finds an absence of a second valve downstream of the burst disks 8 and 9.

Accordingly, Applicant submits that a prima facie case of obviousness has not

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been established.

Regarding Claims 3 and 4 More Specifically

The Examiner broadly alleges obviousness of Claims 3 and 4 (Paper No. 20060427, page 2), but does not provide any recitation of where each and every element of the claimed invention may be found within either Turner or Paul.

Specifically, Applicant is unable to find any disclosure within either Turner or Paul of the claimed “...*first valve and second valve are linked to prevent the blockage of a flow path of the cryogenic gas to the exhaust vent*” or “...*first valve and second valve are interlocked to prevent the blockage of a flow path of the cryogenic gas to the exhaust vent*”, which are specifically claimed for in Claims 3 and 4, respectively.

In respectful disagreement with the Examiner, Applicant submits that a broad sweeping allegation of obviousness without specific direction within the References as to where each and every element arranged to perform as the claimed invention performs may be found, does not in and of itself establish a prima facie case of obviousness.

Regarding Claim 25

Applicant has amended Claim 25, to now claim, inter alia “...means to prevent blockage of the directed flow path to the vent in fluid communication with the coupled first and second outlets.” No new matter has been added as antecedent support may be found in the application as originally filed, such as at Paragraphs [0023] and [0026], and at originally filed Claims 3, 4, 11, 12, 22, and 23, for example.

In view of the amendment and remarks set forth above, Applicant submits that Claim 25 is directed to allowable subject matter and respectfully requests entry and notice of allowance thereof.

In view of the foregoing, Applicant submits that the References fail to teach or suggest each and every element of the claimed invention and are therefore wholly inadequate in their teaching of the claimed invention as a whole, fail to motivate one skilled in the art to do what the patent Applicant has done, fail to recognize a problem recognized and solved only by the present invention, and fails to offer any reasonable

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expectation of success in combining the References to perform as the claimed invention performs as such a combination would still not perform as the claimed invention performs, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 07-0845. In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above-identified Deposit Account.

Respectfully submitted,

CANTOR COLBURN LLP

Applicant's Attorneys

By: 

David Arnold

Registration No: 48,894

Customer No. 23413

Address: 55 Griffin Road South, Bloomfield, Connecticut 06002
Telephone: (860) 286-2929
Fax: (860) 286-0115